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DOCKET NO. _____

APPLICATION OF SOUTHWESTERN PUBLIC SERVICE COMPANY FOR AUTHORITY TO CHANGE RATES	**§**	**PUBLIC UTILITY COMMISSION OF TEXAS**

DIRECT TESTIMONY
of
EVAN D. EVANS

on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

(*Filename:* EvansRRDirect.doc)

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
2016 Loss Study	SPS's 2016 Transmission and Distribution System Loss Evaluation Study
AED-4CP	Average and Excess Demand – 4 Coincident Peak
AEP	American Electric Power Company
CCOSS	Class Cost of Service Study
CP	Coincident Peak
Commission	Public Utility Commission of Texas
CSW	Central and South West Corporation
DCRF	Distribution Cost Recovery Factor
EPE	El Paso Electric Company
FERC	Federal Energy Regulatory Commission
Guernsey	C.H. Guernsey & Company
HPS	High Pressure Sodium
kV	Kilovolt
kW	Kilowatt
kWh	Kilowatt-hour
LED	Light-Emitting Diode
LGS-T	Large General Service – Transmission
NMPRC	New Mexico Public Regulation Commission
O&M	Operation and Maintenance
OPUC	Office of Public Utility Counsel
PCRF	Purchased Power Cost Recovery Factor

Acronym/Defined Term	Meaning
PURA	Public Utility Regulatory Act
QF	Qualifying Facility
REC	Renewable Energy Credit
RFP	Rate Filing Package
ROR	Rates of Return
RS	Residential Service
RSH	Residential Service with Electric Space Heating
SAS-4	Service Agreement Summary-4
SAS-8	Service Agreement Summary-8
SPP	Southwest Power Pool, Inc.
SPS	Southwestern Public Service Company, a New Mexico corporation
T&D	Transmission and Distribution
TCRF	Transmission Cost Recovery Factor
Test Year	April 1, 2016 through March 31, 2017
TOU	Time of Use
Update Period	April 1, 2017 through June 30, 2017
Updated Test Year	July 1, 2016 through June 30, 2017
WAM	Work and Asset Management system
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

LIST OF ATTACHMENTS

Attachment	Description
EDE-RD-1	Proposed Class Revenue Distribution (*Filename:* EDE-RD-1.xls)
EDE-RD-2	Development of Alternate Target Proposed Revenue by Class (*Filename:* EDE-RD-2.xls)
EDE-RD-3	Comparison of Percent Increases Required to Move Classes to System Average (*Filename:* EDE-RD-3.xls)
EDE-RD-4	Historical Summer Monthly Peaks (*Filename:* EDE-RD-4.xlsx)
EDE-RD-5	Service Availability Charge Determination (*Filename:* EDE-RD-5.xlsx)
EDE-RD-6	TOU Communication Plan (*Filename:* EDE-RD-6.docx)
EDE-RD-7	Proposed Residential Service Rate Design (*Filename:* EDE-RD-7.xls)
EDE-RD-8	Alternative Residential Service Rate Design (*Filename:* EDE-RD-8.xls)
EDE-RD-9	Calculation of LED Payback Compared to Previous Light Types – Texas Retail (*Filename:* EDE-RD-9.xlsx)
EDE-RD-10	Workpapers of Evan D. Evans (*Filename:* EDE-RD-10.xlsx)

DIRECT TESTIMONY
OF
EVAN D. EVANS

I. WITNESS IDENTIFICATION AND QUALIFICATIONS

Q. Please state your name, business address, and job title.

A. My name is Evan D. Evans. My business address is 790 South Buchanan Street, Amarillo, Texas 79101.

Q. On whose behalf are you testifying in this proceeding?

A. I am filing testimony on behalf of Southwestern Public Service Company, a New Mexico corporation ("SPS") and wholly-owned electric utility subsidiary of Xcel Energy Inc. ("Xcel Energy").

Q. By whom are you employed and in what position?

A. I am employed by SPS as Director – Regulatory and Pricing Analysis.

Q. Please briefly outline your responsibilities as Director – Regulatory and Pricing Analysis.

A. My responsibilities include:

- Developing and implementing SPS's regulatory program to support Xcel Energy's corporate objectives and to ensure SPS fulfills all legal and regulatory requirements of the Public Utility Commission of Texas ("Commission"), the New Mexico Public Regulation Commission ("NMPRC"), and the Federal Energy Regulatory Commission ("FERC");
- Directing the development and execution of all regulatory case filings before both state commissions and the FERC;
- Directing regulatory activities that establish and maintain state and federal commission relationships and overseeing the administration of regulatory rules and procedures; and
- Providing regulatory support for SPS's participation in the Southwest Power Pool ("SPP").

Q. Please summarize your educational and professional background.

A. I graduated from Texas Tech University with a Bachelor of Business Administration degree in Finance in May 1980.

Upon graduation, I was employed as a Rate Analyst at West Texas Utilities Company, a wholly owned subsidiary of Central and South West Corporation ("CSW"), which was acquired by American Electric Power Company ("AEP") in June 2000. During my 20-year career with CSW and AEP, I held a variety of professional analytical, consultant, and management positions in the rates, regulatory services, load research, and marketing and business development areas.

In October 2000, I joined C.H. Guernsey & Company ("Guernsey"), which is an employee-owned, professional consulting firm offering engineering, architectural, economic, and construction management services to utilities, industries, and government agencies throughout the United States and internationally. While employed with Guernsey, I managed the firm's Dallas regional office and served as a consultant to electric utility industry clients in a variety of areas, including regulatory compliance, integrated resource planning, electric utility cost of service issues, rate studies, financial analysis, economic feasibility analysis, retail electric choice, and wholesale power supply contract negotiations.

In September 2006, I left Guernsey and accepted the position of Director-Regulatory Services with El Paso Electric ("EPE"). I was promoted to Assistant Vice President-Regulatory Services and Rates in July 2008. While at EPE, I established the company's Regulatory Case Management and Energy Efficiency & Utilization departments. My responsibilities included direction of the company's Energy

Efficiency & Utilization, Economic & Rate Research, Regulatory Case Management, and Regulatory Accounting departments and their associated missions.

On January 1, 2014, I began my employment with Xcel Energy as Regional Vice President – Rates and Regulatory Affairs for SPS. On March 16, 2017, I became Director – Regulatory and Pricing Analysis for SPS.

Q. Have you testified before any regulatory authorities?

A. Yes. I have testified in multiple cases or dockets and on a variety of subjects before the Commission, the NMPRC, the Georgia Public Service Commission, and the Oklahoma Corporation Commission. I have also submitted testimony before the FERC.

II. ASSIGNMENT, INTRODUCTION OF SPS WITNESSES IN THE RATE DESIGN PHASE, AND SUMMARY OF TESTIMONY

Q. What are your assignments in this proceeding?

A. I am SPS's cost allocation and rate design overview and policy witness. In addition, I support SPS's proposed rate design and sponsor the proposed rate tariffs. Specifically, I will:

(1) introduce the other SPS witnesses in the Rate Design phase of this case;

(2) set out the specific relief that SPS is requesting of the Commission regarding the issues in the Rate Design phase of this case;

(3) describe the Rate Filing Package ("RFP") Schedules that I sponsor or co-sponsor;

(4) describe SPS's proposed distribution of the revenue requirement among the rate classes, and present the proof of revenue for the proposed rates;

(5) explain how SPS has designed the rates necessary to recover the revenue requirement; and

(6) describe the proposed revisions to SPS's Texas retail rule and rate tariffs.

Q. Please summarize your testimony.

A. Using the class cost of service study ("CCOSS") developed by SPS witness Richard M. Luth, I developed the proposed base revenue increases among the Texas retail customer classes, and I have designed rates in such a way as to bring each class to its full cost of service. The fundamental principles utilized in the proposed rate design are based on cost causation. My testimony demonstrates that SPS's proposed sales revenue requirement has been developed in order to move each class significantly toward the calculated cost of providing service to that class. In addition,

the individual rates are designed so that the rates for each class will adequately recover the proposed revenue requirement by customer class and the rates will provide rational price signals to customers. I recommend that the Commission approve the proposed rate design.

In addition, I present certain tariff revisions that are necessary to implement new policies or to simplify the administration of the tariffs. I recommend the Commission approve the proposed tariff revisions.

Q. Are you the only SPS witness on cost allocation and rate design in this proceeding?

A. No, three additional SPS witnesses testify on cost allocation and rate design issues.

Richard M. Luth:

(1) explains how SPS derived the jurisdictional allocators that are used to allocate costs among SPS's three jurisdictions: Texas retail, New Mexico retail, and wholesale, which is regulated by FERC;

(2) describes the adjustments SPS made to Updated Test Year customer billing data, including the use of year-end customer counts;[1]

(3) explains the calculation of, and adjustments to, SPS's present revenues;

(4) describes the CCOSS and explains how it is developed and used to allocate costs among the customer classes, including the steps undertaken as part of that study to functionalize, classify, and allocate costs; and

(5) provides the baselines for the Transmission Cost Recovery Factor ("TCRF"), Distribution Cost Recovery Factor ("DCRF"), and Purchased Power Capacity Cost Recovery Factor ("PCRF").

[1] The Test Year in this case is the period from April 1, 2016 through March 31, 2017. Under Public Utility Regulatory Act § 36.112, SPS has opted to update the Test Year. The Update Period is the three-month period from April 1, 2017 through June 30, 2017. The Updated Test Year, which is the period being used to set rates in this proceeding, is the period from July 1, 2016 through June 30, 2017.

Jannell F. Marks:

(1) describes SPS's load research function and the load research information that serves as the primary basis for the development of Updated Test Year demand allocation factors; and

(2) discusses the weather normalization of kilowatt-hour ("kWh") sales and system peaks.

Duane Ripperger:

(1) discusses SPS's Transmission and Distribution ("T&D") 2016 System Loss Evaluation Study ("2016 Loss Study") conducted for the period of January 1, 2016 through December 31, 2016; and

(2) describes SPS's 2017 Radial Line Study.

Q. What relief is SPS requesting of the Commission regarding the issues in the Rate Design phase of this case?

A. SPS asks the Commission to grant the following relief regarding the Rate Design phase:

(1) SPS requests that the Commission approve SPS's proposed cost allocation and calculation of present revenues;

(2) SPS requests that the Commission approve SPS's proposed revenue distribution and rate design;

(3) SPS requests that the Commission approve the proposed changes to the rule and rate tariffs;

(4) SPS requests that the Commission approve the 2016 Loss Study;

(5) SPS requests that the Commission approve the proposed baselines for SPS's TCRF, DCRF, and PCRF; and

(6) SPS requests that the Commission approve the final proposed tariffs as set out in Schedule Q-8.8.

Q. Will your testimony and certain schedules you sponsor be updated?

A. Yes. As explained by SPS witness William A. Grant, SPS is using an Updated Test Year in this case to determine its revenue requirement. Specifically, in determining

its proposed revenue requirement, SPS replaced the first three months of the Test Year (April 2016 – June 2016) with the three months of the "Update Period" (April 2017 – June 2017). This election necessarily requires that certain costs provided in SPS's Application will be based on estimated or forecasted data.

SPS will file an update 45 days after filing its Application that will replace the Update Period estimates with actual numbers. As discussed in Mr. Luth's direct testimony, he relied on estimated or forecasted Updated Test Year data for certain calculations in the CCOSS in order to match the period used to allocate costs with the period in which the costs were incurred. When SPS files its update, Mr. Luth will update the calculations that affect jurisdictional allocation, customer class cost allocation, and present revenue to reflect the actual billing determinants for the Update Period. Based on those updated calculations, I will update SPS's proposed revenue distribution and rate design.

Q. Were Attachments EDE-RR-1 through EDE-RR-10 prepared by you or under your direct supervision or control?

A. Yes.

Q. Were the RFP schedules and portions of the Executive Summary that you sponsor or co-sponsor prepared by you or under your direct supervision or control?

A. Yes.

Q. Do you incorporate the RFP schedules and portions of the Executive Summary that you sponsor or co-sponsor into this testimony?

A. Yes.

III. RATE FILING PACKAGE SCHEDULES

Q. Please identify the RFP schedules that you sponsor or co-sponsor.

A. Table EDE-RD-1 contains the schedules that I sponsor or co-sponsor. I also sponsor the portions of the Executive Summary to which these schedules correspond.

Table EDE-RD-1

Schedule Q *Rate Design*	1, 1.1, 3, 4.1, 4.2, 6, 7, 8.8, and 8.9

Q. Please list the RFP schedules that you will update as part of SPS's October 2017 update filing?

A. As part of SPS's update filing, I will update the following schedules to replace forecasted or estimated data for the Update Period with actual data:

- Schedule Q – 1, 7, 8.8, and 8.9.

Q. In Table EDE-RD-1, you listed a number of Q schedules that you sponsor. Please explain the general purpose of Q schedules.

A. The Q schedules are related to rate design or pricing. I sponsor some of the Q schedules, and other witnesses sponsor some of them.

Q. What do Schedules Q-1 and Q-1.1 contain?

A. Both schedules contain revenue summaries in tabular form by class and for the entire system. Schedule Q-1 relies on forecasted data for the Update Period. Mr. Luth co-sponsors Schedules Q-1 and Q-1.1. For each of these schedules, I provide the rate information necessary to calculate and prepare the revenue summaries.

Q. What does Schedule Q-3 address?

A. Schedule Q-3 contains information regarding proposed changes in miscellaneous charges, including a description of the charge, the current charge amount, the proposed charge amount, and the justification for the proposed change. In this case, the only changes in miscellaneous charges that SPS is proposing are changes to reconnect charges.

Q. Do you also sponsor the Q-4 schedules?

A. Yes. Schedule Q-4.1 contains the present and proposed classes and designations. With this filing, SPS proposes to eliminate the Residential Service with Electric Space Heating ("RSH") rider so that residential customers are grouped into one customer class. The elimination of the RSH rider was part of the Unopposed Stipulation in Docket No. 45524.[2] Schedule Q-4.2 contains the rationale for any changes in class structures or rate design. Schedule Q-4.2 contains the rationale for any changes in class structures or rate design.

Q. What is Schedule Q-6?

A. Schedule Q-6 requires a justification for consumption level-based rates, such as inclining or declining block rates.

Q. What is Schedule Q-7?

A. Schedule Q-7 is the proof of revenue statement showing the expected adjusted billing units, the proposed rates, and the resulting base rate revenues. The proof of revenue is broken out by class. This schedule relies on forecasted data for the Update Period.

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[2] *Application of Southwestern Public Service Company for Authority to Change Rates*, Docket No. 45524, Unopposed Stipulation at 8-9 (Dec. 7, 2016), and Final Order at Finding of Fact No. 42, and

I co-sponsor this schedule with Mr. Luth. I support the calculation of revenues at proposed rates.

Q. What does Schedule Q-8 address?

A. Schedule Q-8 contains several sub-schedules that summarize rate design. Schedule Q-8.8 contains a complete set of SPS's proposed changes to its rate schedules. And finally, Schedule Q-8.9 contains a bill comparison between present and proposed rates for the residential and small commercial classes.

Ordering Paragraph No. 1 (Jan. 26, 2017).

IV. REVENUE INCREASE DISTRIBUTION

Q. What topic do you discuss in this section of your testimony?

A. I describe SPS's proposed methodology for distributing the proposed revenue increases among the customer classes and an alternative revenue requirement distribution that reflects moderation.

Q. What principles have you relied upon in deciding how to distribute the proposed revenue increases among the customer classes?

A. In Docket No. 43695, SPS's last fully litigated base rate case, the Commission declined to adopt any gradualism adjustment.[3] And the Commission acknowledged that one of its primary responsibilities in setting rates was ensuring those rates were, to the greatest extent reasonable, consistent with cost causation.[4] As a result, the rate increases for customer classes were distributed in a manner designed to move each class to equalized rates of return ("ROR"). Therefore, in this rate case, SPS has distributed its revenue increases among its customer classes such that each class is assigned the sales revenue requirement that results from the CCOSS.

Q. Do you have an attachment showing the base rate increases and relative ROR by class?

A. Yes. Attachment EDE-RD-1 shows the proposed base rate increases and ROR by class. This attachment moves all classes to equalized RORs consistent with the Commission's Order in Docket No. 43695.

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[3] *Application of Southwestern Public Service Company for Authority to Change Rates*, Docket No. 43695, Order on Rehearing at 10 (Feb. 23, 2016).

[4] *Id.*

Q. Did you consider any moderation in the development of the distribution of the proposed revenue increases by class?

A. Yes. I have also developed an alternative proposed revenue increase distribution that moderates the impacts on classes that will receive increases that are somewhat higher or lower than the average. This alternative proposed revenue distribution is provided in Attachment EDE-RD-2.

Q. Please describe the alternative revenue increase distribution.

A. The alternative revenue increase distribution was developed based on the following aspirational criteria:

1. The proposed revenue increase will be distributed among the classes such that the ROR for each class will move closer to the system average ROR;

2. The proposed ROR for each class will be no less than 90% of the proposed Texas average ROR and no more than 110% of the proposed Texas average ROR; and

3. Individual classes should receive increases of at least one-half of the proposed Texas average percentage increase, but not more than one and one-half of the proposed Texas average percentage increase.

The alternative revenue increase distribution satisfies all three criteria, except that one class, Small Municipal and School Service, received less than one half the Texas average increase in order to produce an ROR that was less than 1.10 times the Texas average ROR.

Q. Why did you develop the alternative revenue increase distribution?

A. I developed the alternative revenue distribution as an option that would avoid the potential for over-correction due to common variations in class performances between test years. The approach offers the Commission a moderate alternative to the strict application of the results from the test-year class cost allocation study.

In Docket No. 43695, SPS's first fully litigated Texas base rate case in over 35 years, all classes were moved to the fully allocated costs, which resulted in a wide range of impacts by class. Some classes received significant base rate increases, while other classes received significant base rate decreases. Also, as shown on Attachment EDE-RD-3, the increases for individual classes that were required to move all classes to equalized RORs for the filed update in Docket No. 45524 and in this rate case vary significantly among classes and between rate cases. These significant variations between cases can reduce the stability of rates and lead to customers receiving inaccurate pricing signals. Therefore, the alternative revenue distribution was developed in the event the Commission seeks to mitigate the significant variation in impacts among classes.

Q. Why are there significant variations in required increases by class between rate cases?

A. The RORs produced by classes will vary to some extent between rate cases due to a variety of factors. Those factors include:

- differences in the composition of costs between test years;
- variances in the hour and day of summer monthly system peaks;
- variations in the composition of customers within classes;
- economic factors;
- non-normalized weather differences;
- energy efficiency and technology advancements implemented by customers; and
- unusual events or circumstances that are not normalized and that affect the test year.

Q. Did you analyze the results to determine explanations for the variations in the results among classes?

A. Yes, I did. In particular, I identified the major factors that caused Residential Service ("RS"), Municipal and State Street Lighting, Large Municipal Service, and Large General Service – Transmission ("LGS-T") to require the largest percentage base rate increases to produce the system average ROR.

For the RS class, the coincident peak ("CP") load factors for the months of June and September 2016 were low. This signifies that their contribution to the system peaks in those months, two of the four monthly CPs used in the Average and Excess Demand-4 Coincident Peak ("AED-4CP") allocation, is high relative to the usage for the class. This results in more production and transmission costs being allocated to the Residential Service class per metered kWh during the Updated Test Year.

The greater percentage increase for the Municipal and State Street Lighting rate resulted from the fact that the amounts of street lighting and signals systems Operation and Maintenance ("O&M") expenses, FERC Account Nos. 586 and 595, were the lowest annual amounts in the last 10 years and were significantly lower than the average for that period. These O&M expenses constitute a significant portion of the cost of service for the Street Lighting class. Therefore, although the amount of those expenses during the Updated Test Year is below average, it is significantly more than the amount used to design rates for this class in either Docket No. 43695 or Docket No. 45524.

The major factor identified in causing the larger than average increase for the Large Municipal Service class is that water pumping loads and usage during the

summer were very low during the updated test year for Docket No. 45524 (calendar year 2015). As a matter of fact, 2015 was one of the wettest years on record in the Amarillo area and throughout the Texas Panhandle. In contrast, 2016 was a warmer and drier year for Amarillo and the Texas Panhandle, and water pumping loads were higher. These increased loads caused more production and transmission costs to be allocated to the Large Municipal Service class.

Finally, the three major components driving the need for this rate case that SPS witness David T. Hudson discusses in his testimony all have a greater proportional impact on the LGS-T class than other classes. Those major cost drivers are: (1) investments in infrastructure to support our service area, promote economic development, and to maintain and improve our operations; (2) the reduction in wholesale power sales; and (3) the shorter operating lives of the Tolk Generating Station. Each of these drivers is either completely or predominantly production and transmission related. Due to the fact that production and transmission demand related costs comprise over 75% of the total base rate revenue requirement for LGS-T, these major drivers have a greater impact on LGS-T than they do on other classes.

Q. Were there any significant unusual events or circumstances that occurred in SPS's Test Year or Update Period that could substantially affect the results of the class cost allocation study?

A. Yes. One significant unusual event occurred during the Update Period. For the month of June 2017, the monthly CP for SPS's generation system occurred on Saturday, June 17, 2017. It is rare for SPS's system for a summer monthly peak to occur on a weekend day. As shown in Attachment EDE-RD-4, SPS did not have a summer monthly generation system peak that occurred on a weekend day in the last

12 years. In fact, Attachment EDE-RD-4, shows that the generation system peaks for summer months most often occur during the days of Tuesday through Thursday.

The composition of the loads by customer class during weekend days are usually very different from the composition of system loads during the work week. These differences in composition of the system peak loads for a summer month will impact the calculation of the AED-4CP production allocator and, thereby, the allocation of a significant amount of rate base and costs allocated among the customer classes.

V. RATE DESIGN OVERVIEW

Q. What topic do you discuss in this section of your testimony?

A. I explain how I designed the rates for each customer class.

Q. What do you mean when you refer to "rate design"?

A. I am referring to the way in which the revenue requirement amount recoverable from a particular class is allocated among demand charges, energy charges, and service availability charges. Collectively, the charges should be sufficient to recover the full amount of the revenue requirement allocated to that class.

Q. Are rates designed for all customer classes in the same way?

A. No. The rate design for a particular class is partly dependent on the resources available to measure how the customer uses electricity. Residential customers, for example, do not have demand meters, so they do not pay demand charges. Instead, all of their costs are recovered through customer charges and energy charges. Similarly, it is not feasible to install a demand or energy meter on each street light, so rates for street lights are based on a per-light charge.

Q. How are customer-related charges recovered?

A. Customer-related costs are billed through a monthly service availability charge that does not vary with monthly differences and that applies to each customer in a customer class. The service availability charge generally recovers costs associated with making service available to a customer, such as meters, meter reading, service connections to the customer from the distribution system, and billing. The charge also covers the fixed costs and O&M expenses associated with the facilities installed specifically to serve an individual customer such as meters and service lines.

Attachment EDE-RD-5 provides the calculated monthly service availability charges proposed for the rate classes.

Q. What costs are recovered through the demand charge element of base rates?

A. The demand charge is designed to recover the fixed capacity portion of the production, transmission, distribution substation, primary distribution, and secondary distribution systems.

Q. How are demand-related costs recovered from customers?

A. Production, transmission, and distribution demand-related costs are billed to the customer classes through a kW ("kilowatt") demand charge, if applicable, or through a kWh charge for customer classes that do not have demand metering and kW demand charges. Billing for demand-related costs varies with differences in monthly kW demand or differences in monthly kWh if a kW demand charge is not billed.

Q. How are energy-related costs billed?

A. Energy-related costs are billed through a kWh charge.

Q. Are the kW or the kWh rates seasonally differentiated?

A. Yes. A seasonal differential is applied to kW demand charges during the summer months of June through September for those customer classes with meters that measure each customer's demand. If the rate does not have a kW demand charge, the kWh rate is seasonally differentiated for the capacity cost share of the rate. KWh rates also have a non-fuel energy cost component that does not vary by season.

Q. Why are the kW or kWh rates seasonally differentiated?

A. A seasonal differential provides a price signal to customers that it is more costly to provide the facilities necessary for service during peak summer months. A higher

level of production, transmission, and distribution capacity is necessary to provide service at higher summer levels, resulting in higher costs than if loads on the system were level in all months.

VI. TIME OF USE RATES

Q. What topics do you address in this section of your testimony?

A. I discuss the experimental Time of Use ("TOU") rate options the Commission approved in Docket No. 43695. I also explain that SPS is proposing a single RS rate that eliminates the RSH rider, and a Residential TOU rate option could be a beneficial option for many customers who would have been on the RSH rate.

Q. What approval did SPS receive in Docket No. 43695 to offer experimental Time of Use ("TOU") rate options?

A. SPS received Commission authorization to offer experimental TOU rate options to customers in the RS, Small General Service, Secondary General Service, Primary General Service, Small Municipal and School Service, Large Municipal Service, and Large School Service classes. In addition, caps were established on the number of participants for each of the TOU rate offerings.

Q. What steps has SPS taken to communicate to customers the availability of the experimental TOU rates?

A. SPS has been and will continue to be proactive in communicating to customers the availability of the experimental TOU rates. Specifically, during the March 2016 billing period, SPS included a bill message describing the rates and directing customers to SPS's website for further information. In addition, on SPS's website and its social media (Facebook and Twitter), SPS published information addressing who qualifies for the rates and helpful information that will aid customers in deciding whether the rates make sense for their particular circumstances.

Q. You just mentioned that SPS is proposing a single RS rate that eliminates the RSH rider. How does the availability of SPS's TOU rates affect customers who are now taking service under the RSH rider?

A. SPS's last base rate case, Docket No. 45524, was resolved in accordance with an Unopposed Stipulation that was approved by the Commission.[5] In that stipulation, SPS agreed to work cooperatively with Staff and the Office of Public Utility Counsel ("OPUC") to develop a plan to: (i) inform RSH customers that the RSH option is ending and to communicate to RSH customers the value of the Residential TOU rider; and (ii) market the Residential TOU rider in general.[6] SPS further agreed to implement these plans prior to the conclusion of this base rate case.

Q. Has SPS developed a plan to inform RSH customers that the RSH option is ending?

A. Yes. Prior to filing this case, SPS has conferred with Staff and OPUC regarding the elimination of the RSH rider and SPS's agreement to develop a plan for informing RSH customers of this fact and the value of the Residential TOU rider. Attachment EDE-RD-6 contains the proposed communication plan SPS presented to Staff and OPUC for their consideration and input. SPS will continue to work with Staff, OPUC, and any other interested parties to refine the proposed communication plan prior to the implementation of new rates.

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[5] Docket No. 45524, Final Order at Ordering Paragraph No. 1 (approving SPS application to change rates consistent with unopposed stipulation).

[6] Docket No. 45524, Final Order at Finding of Fact No. 42(c).

Q. Please describe SPS's proposed communication plan.

A. SPS is proposing a multi-faceted approach to inform RS customers taking service under the RSH rider about the future of the rider and to communicate to those customers the potential benefits of the Residential TOU rider option. Specifically, SPS's proposed communication efforts will include:

- As soon as practical after the new rates from this rate case are approved, SPS will send a direct mail letter notice to every current RSH customer to inform them that the RSH rider is being terminated and to make them aware of the availability of the Residential TOU option.
- At the same time, SPS will also use social media outlets to inform customers the RSH rider is being terminated and to educate them on the Residential TOU option.
- Finally, SPS will have informational notices (onserts) on all Residential Service customer bills in August, prior to the end of the on-peak season that will highlight the attributes and benefits of the Residential TOU option.

The estimated cost to implement this communication plan is $20,270.

Q. Besides informing RSH customers of the benefits of the Residential TOU rider, did SPS agree to any other accommodations to promote the Residential TOU rider to RSH customers?

A. Yes. SPS agreed to eliminate the cap on the number of RSH customers that may participate in the TOU rate plans.[7] Furthermore, in this rate case, SPS is proposing to double the cap on the number of customers that can participate in all of the TOU rate offerings.

[7] Docket No. 45524, Final Order at Finding of Fact No. 42(d).

VII. PROPOSED CHANGES TO RATES

A. Residential Service, Residential Service with Electric Space Heating Rider, and Residential Service TOU Rider

Q. Please summarize the changes to RS and the RS with Electric Space Heating rider.

A. As I mentioned in the immediately preceding section of my testimony, SPS has already started working with Staff and OPUC to develop a RS rate design that eliminates the RSH rider, and that moderates the effect on RSH customers of eliminating the RSH option.

To that end, in this filing SPS is proposing to eliminate the RSH rider. In order to moderate the effect on current RSH customers, SPS is proposing to modify the design of the RS rate during the winter months to have a two-block energy rate structure with the second block priced at a lower rate than the first block and to increase the seasonal differential between the summer energy charge and the energy charge for the first winter block by 48%. The first block will be applicable to all kWh consumption for an RS customer in a month up to 900 kWh. The proposed rate for consumption in the first block is $0.085690 per kWh. The second block will be applicable to all kWh consumption in a month above 900 kWh. The proposed rate for all kWh consumption above 900 kWh is $0.062720 per kWh, or $0.022970 per kWh less than the charge for energy consumption in the first block.

Overall, base rate revenue from residential customers under the proposed rates will increase $42.7 million, or 23.0%. Under SPS's proposal, the service availability charge will continue to be $10.00 per month. The summer energy charge will increase $0.022218 per kWh, or 28.3%, to $0.100790. For basic R S, the winter

energy charge will increase $0.017337 per kWh, or 25.4%, to $0.085690 for the first block. For the second block, the energy charge will decrease $0.005633 per kWh, or -8.2%, from the first block to $0.062720 per kWh.

The development of the proposed RS rate is shown on Attachment EDE-RD-7.

Q. Please explain the reason for the proposed winter rate structure for the RS rate.

A. The proposed winter rate structure was designed to mitigate the impact of the elimination of the RSH rate on current RSH customers. The amount of kWh in the first block was set at 900 kWh a month, a level that approximates the average monthly usage for current RSH customers during the months of May and November, the months with the lowest average consumption per customer for the current RSH rider. Because these months have few heating degree hours, it establishes a base for which consumption above the level in those months can be reasonably assumed to be principally heating load for RSH customers. Therefore, establishing the second declining block for all consumption above 900 kWh targets the electric space heating consumption.

It should also be noted that 900 kWh is higher than the average monthly consumption for current RS customers in every winter month except January. Consequently, establishing the second block at 900 kWh will limit the level at which most non-RSH customers would notice the price structure change and limit the potential that RS customers would be encouraged to use energy inefficiently.

Q. Does SPS intend for the proposed winter declining block rate structure to be permanent?

A. Not necessarily. This structure was designed to mitigate the rate impact on RSH customers of eliminating the RSH rider in this case. It would be prudent to evaluate the impact the final rate change approved in this case will have on customers and determine in future rate cases whether the declining block structure for the winter energy charge is cost justified and whether it should continue, be modified, or eliminated.

Q. With no increase, will the service availability charge recover the full customer component cost of service?

A. No. The service availability charge was kept constant in order to moderate the impact of the proposed rate design on low usage residential customers, particularly those customers who are currently served under the RSH rider.

However, with no increase, the service availability charge will recover approximately 81% of the customer component costs for Residential Service customers. The remaining customer component costs for residential customers will be recovered under the energy charges.

Q. Does the proposed rate design somewhat mitigate the effect that eliminating the RSH rider will have on current RSH customers?

A. Yes. The combination of the winter declining block rate structure, the significantly increased price differential between the summer energy charge and the first energy block in the winter, and no increase to the service availability charge mitigates the impacts on current RSH customers to a limited extent. However, as can be seen in Attachment EDE-RD-7, RSH customers will experience significantly larger base rate and total bill increases than current RS customers.

Q. Have you identified any alternative RS rate structures that would better mitigate the effects on current RSH customers?

A. Yes. SPS developed an alternative rate structure that would mitigate the impacts on current RSH customers significantly more than the proposed structure, which is shown in Attachment EDE-RD-8. This alternative rate design is designed to:

- temporarily maintain a separate RSH rider that would have the same summer and winter energy charges as the standard RS rate;
- not contain a declining block rate structure;
- provide RSH customers with a credit applied to their energy consumption during the winter months; and
- set the winter credit initially at 75% of the current difference between the RS and the RSH winter energy charges.

Q. What do you mean by the statement that the alternative rate design would temporarily maintain a separate RSH rider?

A. First, the RSH rider would remain closed. Therefore, no new customers could take advantage of the RSH rider.

In addition, the RSH rider credit could be reduced and, ultimately, eliminated in future rate cases.

Q. Please summarize the changes to the Residential Service Experimental TOU rider.

A. The Residential Service Experimental TOU rider was developed in conjunction with the standard RS rate. As a result, consistent with RS, the monthly service availability charge was not changed. Also, both the base energy charge, which is applicable to energy usage in all hours, and the on-peak energy adder were increased the same percentage, 26.5%. This percentage is approximately equal to the average

proposed increase for the energy charge under the standard RS rate. This approach was utilized in order to maintain the same relationship between the TOU rate and the standard RS rate and to maintain the same relative difference between the base energy charge and the on-peak energy adder within the TOU rate.

B. Small General Service

Q. Please summarize the changes to Small General Service.

A. The base rate structure of Small General Service will not change, in that applicable charges include a service availability charge and an energy charge that increases during the months of June through September compared to other months. This approach is consistent with the rate design used in SPS's last base rate case, Docket No. 45524, and approved by the Commission in SPS's last fully litigated base rate case, Docket No. 43695.

SPS is also proposing an Optional Unmetered Service Rider to Small General Service. This option will be available for instances when metering of energy would be impractical because of the low monthly level of usage and when a customer's load and usage has little variation between months and kWh usage can be reasonably estimated by the Company. The seasonal energy charge will be equal to the seasonal energy charges under the standard service rate. However, the monthly service availability charge will be decreased to reflect the fact there is no meter investment or associated metering and meter reading costs.

Overall, base rate revenue from Small General Service will increase by approximately $2.6 million, or 12.6%. Under SPS's proposal, the service availability charge will increase $1.65 per month, or 14.7%, to $12.90. The proposed service

availability charge for Optional Unmetered Service will be $7.25 per month, which is $5.65 lower than the charge under the standard rate. The summer energy charge will increase $0.007176 per kWh, or 11.4%, to $0.070314. The winter energy charge will increase $0.006766 per kWh, or 12.7%, to $0.060248.

Q. Please summarize the changes to the Small General Service Experimental TOU rider.

A. The Small General Service Experimental TOU rider was developed in conjunction with the standard Small General Service rate. As a result, the monthly service availability charge was increased by the same amount as the standard Small General Service rate, $1.65. Also, both the base energy charge, which is applicable to energy usage in all hours, was adjusted by approximately the same percentage, 12.5%, as the winter energy charge under the standard Small General Service rate. The on-peak energy adder was increased by the same percentage as the summer energy charge under the standard Small General Service rate, 11.4%. This approach was utilized in order to maintain the same relationship between the TOU rate and the standard Small General Service rate and to maintain a comparable relationship between the base energy charge and the on-peak energy adder as was in the current TOU rate.

C. Secondary General Service

Q. Please summarize the changes to Secondary General Service.

A. The base rate structure of Secondary General Service will not change, in that applicable charges include a service availability charge, a year-round energy charge, and a demand charge that increases during the months of June through September compared to other months. This approach is consistent with the rate design used in SPS's last base rate case, Docket No. 45524, and approved by the Commission in SPS's last fully litigated base rate case, Docket No. 43695.

Overall, base rate revenue from Secondary General Service will increase $6.9 million, or 6.2%. Under SPS's proposal, the service availability charge will increase $2.50 per month, or 9.8%, to $28.10. The energy charge will increase $0.000325 per kWh, or 4.2%, to $0.008108. The summer demand charge will increase $0.81 per kW, or 5.4%, to $15.93. The winter demand charge will increase $0.94 per kW, or 7.2%, to $14.00.

Q. Please summarize the changes to the Secondary General Service Experimental TOU rider.

A. The Secondary General Service Experimental TOU rider was developed in conjunction with the standard Secondary General Service rate. As a result, the monthly service availability charge was increased by the same amount as the standard Secondary General Service rate. Also, the base energy charge, which is applicable to energy usage in all hours, was increased by the same percentage as the proposed increase for the energy charge under the standard Secondary General Service rate, 4.2%. The on-peak energy adder was increased by 5.3%, approximately

the same percentage increase as the summer demand charge for the standard tariff. The TOU demand charge was increased by approximately the average of the seasonal demand charges under the standard rate. This approach was utilized in order to maintain a relatively consistent relationship between the TOU rate and the standard Secondary General Service rate and to maintain relatively the same difference between the base energy charge and the on-peak energy adder within the TOU rate.

D. Primary General Service

Q. Please summarize the changes to Primary General Service.

A. The base rate structure of Primary General Service will not change, in that applicable charges include a service availability charge, a year-round energy charge, and a demand charge that increases during the months of June through September compared to other months. This approach is consistent with the rate design used in SPS's last base rate case, Docket No. 45524, and approved by the Commission in SPS's last fully litigated base rate case, Docket No. 43695.

Overall, base rate revenue from Primary General Service will increase $3.7 million, or 5.8%. Under SPS's proposal, the service availability charge will decrease $18.90 per month, or -32.3%, to a cost of service-based level of $39.60. The energy charge will decrease $0.000107 per kWh, or -1.8%, to $0.005853. The summer demand charge will increase $1.05 per kW, or 8.2%, to $13.81. The winter demand charge will increase $1,182.80 per kW, or 10.7%, to $12.16.

Q. Please summarize the changes to the Primary General Service Experimental TOU rider.

A. The Primary General Service Experimental TOU rider was developed in conjunction with the standard Primary General Service rate. As a result, the monthly service availability charge was decreased by the same amount as the standard Primary General Service rate. Also, the base energy charge, which is applicable to energy usage in all hours, was decreased by the same percentage as the proposed decrease for the energy charge under the standard rate, -1.8%. The on-peak energy adder was increased by 8.2%, the same percentage increase as the summer demand charge for the standard tariff. The TOU demand charge was increased by approximately the average of the seasonal demand charges under the standard rate. This approach was utilized in order to maintain a consistent relationship between the TOU rate and the standard Primary General Service rate and to maintain a consistent relative difference between the base energy charge and the on-peak energy adder within the TOU rate.

Q. Please summarize the changes to Service Agreement Summary-4.

A. The base rate structure of Service Agreement Summary-4 ("SAS-4") will not change, in that applicable charges are billed through a two-step energy charge, and a kW-based power factor charge. This approach is consistent with the rate design used in SPS's last base rate case, Docket No. 45524, and approved by the Commission in SPS's last fully litigated base rate case, Docket No. 43695.

Overall, base rate revenue from SAS-4 will increase by approximately $179,000 per year, or 5.7%. Under SPS's proposal, the first block of the energy charge for the first 3.5 million kWh per month will increase $0.001442 per kWh, or

5.7%, to $0.026952. The second block of the energy charge for kWh in excess of 3.5 million kWh per month will increase $0.001121 per kWh, or 5.7%, to $0.020959.

Q. Please summarize the changes to Service Agreement Summary-8.

A. The base rate structure of Service Agreement Summary-8 ("SAS-8") will not change, in that applicable charges are billed through an energy charge. The SAS-8 charge is designed to recover, at a minimum, distribution capacity costs because the facility delivers electrical power to the same substation from which it takes SPS power transformed to primary voltage.

Overall, base rate revenue from SAS-8 will increase approximately $42,000 per year, or 6.9%. Under SPS's proposal, the energy charge will increase $0.000478 per kWh, or 5.6%, to $0.008942.

E. Large General Service – Transmission

Q. Please summarize the changes to LGS-T charges.

A. The base rate structure of LGS-T will not change, in that applicable charges include a service availability charge, a year-round energy charge, and a demand charge that increases during the months of June through September compared to other months. In addition, a different energy charge and demand charge will apply depending upon whether the LGS-T customer takes service at 69 kilovolts ("kV") or 115 kV and above. The proposed LGS-T rate is designed as a single rate with the demand and energy charges for service 69 kV and 115 kV and above differentiated by the applicable demand and energy loss factors. This is a change from prior cases. This approach was implemented pursuant to the Unanimous Stipulation approved by the Commission in Docket No. 45524.

Overall, base rate revenue from LGS-T will increase $21.3million, or 17.0%. The proposed service availability charge will increase $1,634.00 per month, or 230.1%, to a cost of service-based level of $2,344.00.

The energy charge for 69 kV service will increase $0.000214 per kWh, or 4.8%, to $0.004719 per kWh. The energy charge for 115 kV and higher service will increase $0.000421 per kWh, or 9.9%, to $0.004694 per kWh.

The Renewable Energy Credit ("REC") Opt-out credit for 69 kV service will be $0.000110 per kWh higher, or 57.5%, at a cost-based $0.000081. The REC Opt-out credit for 115 kV service will be $0.000109 per kWh higher, or 57.5%, at a cost-based $0.000081.

The increment to the energy charge for 69 kV service that is charged franchise fees is increased by $0.000229, or 3.9%, to $0.006027 per kWh. The increment to the energy charge for 115 kV and above service that is charged franchise fees is increased by $0.000436, or 7.8%, to $0.006002.

The summer demand charge for 69 kV service will increase $0.27 per kW, or 2.3%, to $11.95. The winter demand charge for 69 kV service will increase $1.88 per kW, or 23.1%, to $10.01. The summer demand charge for 115 kV and above service will increase $0.73 per kW, or 6.5%, to $11.89. The winter demand charge for 115 kV and above service will increase $2.14 per kW, or 27.4%, to $9.95.

Q. Please discuss the reason for the proposed change in the development of the LGS-T rate.

A. Section XIII of the Unanimous Stipulation approved in Docket No. 45524 states:

> SPS will treat LGST as a single class in its next rate case, including for cost allocation and revenue distribution purposes. SPS will propose a single set of rates for the LGST class, except that SPS will propose cost-based credit rates for energy and demand charges applicable to higher voltage customers within the LGST class to reflect the lower line losses and other identifiable cost differences associated with serving those higher voltage customers.[8]

Therefore, in this filing, SPS designed the LGS-T rate as a single rate and differentiated the demand and energy charges to reflect the difference in line losses between service at 69 kV and service at 115 kV and above. Because SPS was not able to identify any other cost differences associated with serving customers at the 69 kV and 115 kV and above voltage levels, no additional cost differences were incorporated.

F. Schools and Municipals

Q. Please summarize the changes to Small Municipal and School Service.

A. The base rate structure of Small Municipal and School Service will not change, in that applicable charges include a service availability charge and an energy charge that increases during the months of June through September compared to other months. This approach is consistent with the rate design used in SPS's last base rate case, Docket No. 45524, and approved by the Commission in SPS's last fully litigated base rate case, Docket No. 43695.

[8] Docket No. 45524, Unanimous Stipulation at 10, § XIII.

SPS is also proposing an Optional Unmetered Service Rider to Small Municipal and School Service. This option will be available for instances when metering of energy would be impractical because of the low monthly level of usage and when a customer's load and usage has little variation between months and kWh usage can be reasonably estimated by the Company. The seasonal energy charge will be equal to the seasonal energy charges under the standard service rate. However, the monthly service availability charge will be decreased to reflect the fact there is no meter investment or associated metering and meter reading costs.

Overall, base rate revenue from the Small Municipal and School Service class will increase approximately $33,000, or 2.7%. Under SPS's proposal, the service availability charge will increase $0.20 per month, or 1.5%, to $13.40. The proposed service availability charge for Optional Unmetered Service will be $7.60 per month, which is $5.80 lower than the charge under the standard rate. The summer energy charge will increase $0.001180 per kWh, or 2.6%, to $0.046316. The winter energy charge will increase $0.001437 per kWh, or 3.7%, to $0.040334.

Q. Please summarize the changes to the Small Municipal and School Service Experimental TOU rider.

A. The Small Municipal and School Service Experimental TOU rider was developed in conjunction with the standard Small Municipal and School Service rate. As a result, the monthly service availability charge was increased by the same amount, $0.20, as the standard Small Municipal and School Service rate. Also, the base energy charge, which is applicable to energy usage in all hours, was increased by approximately the average percentage as the average of the energy charges under the standard rate. The

on-peak adder was increased by the same percentage, 2.6%, as the summer energy charge under the standard rate. This approach was utilized in order to maintain a comparable relationship between the TOU rate and the standard Small Municipal and School Service rate and to maintain a comparable relative difference between the base energy charge and the on-peak energy adder within the TOU rate.

Q. Please summarize the changes to Large Municipal Service.

A. The base rate structure of Large Municipal Service will not change, in that applicable charges include a service availability charge, a year-round energy charge, and a demand charge that increases during the months of June through September compared to other months. This approach is consistent with the rate design used in SPS's last base rate case, Docket No. 45524, and approved by the Commission in SPS's last fully litigated base rate case, Docket No. 43695.

Overall, base rate revenue from the Large Municipal Service class will increase $1.4 million, or 19.4%. Under SPS's proposal, the service availability charge will decrease $0.50 per month, or -1.9%, to a cost of service-based level of $25.40. The energy charge at primary voltage will decrease $0.000122 per kWh, or -1.6%, to $0.007451. At secondary voltage, the energy charge will decrease $0.000087 per kWh, or -1.1%, to $0.007605. The summer demand charge at primary voltage will increase $1.83 per kW, or 17.1%, to $12.56. At secondary voltage, the summer demand charge will increase $2.75 per kW, or 25.3%, to $13.62. The winter demand charge at primary voltage will increase $1.71 per kW, or 19.4%, to $10.51. At secondary voltage, the winter demand charge will increase $2.49 per kW, or 28.0%, to $11.39.

Q. Please summarize the changes to the Large Municipal Service Experimental TOU rider.

A. The Large Municipal Service Experimental TOU rider was developed in conjunction with the standard Large Municipal Service rate. As a result, the monthly service availability charge was increased by the same amount, $0.50, as the standard Large Municipal Service rate. The base energy charges for primary and secondary voltages, which is applicable to energy usage in all hours, and the on-peak energy adder were adjusted by approximately the same percentages and the respective energy charges under the standard rates. The on-peak energy adders by voltage level were increased by the same percentage as the summer demand charges by voltage level under the standard rate. The demand charges by voltage level were increased by approximately the average increase to the summer and winter demand charges under the standard rate by voltage level. This approach was utilized in order to maintain a consistent relationship between the TOU rate and the standard Large Municipal Service rate and a consistent relative difference between the base energy charge and the on-peak energy adder within the TOU rate.

Q. Please summarize the changes to Large School Service.

A. The base rate structure of Large School Service will not change, in that applicable charges include a service availability charge, a year-round energy charge, and a demand charge that increases during the months of June through September compared to other months. This approach is consistent with the rate design used in SPS's last base rate case, Docket No. 45524, and approved by the Commission in SPS's last fully litigated base rate case, Docket No. 43695.

Overall, base rate revenue from Large School Service will increase $577,000, or 5.5%. Under SPS's proposal, the service availability charge will increase $2.80 per month, or 8.9%, to a cost of service-based level of $34.10. The energy charge at primary voltage will increase $0.000695 per kWh, or 7.7%, to $0.009685. At secondary voltage, the energy charge will increase $0.000276 per kWh, or 2.9%, to $0.009853. The summer demand charge at primary voltage will increase $1.00 per kW, or 8.4%, to $12.97. At secondary voltage, the summer demand charge will increase $0.64 per kW, or 4.7%, to $14.30. The winter demand charge at primary voltage will increase $1.00 per kW, or 10.2%, to $10.85. At secondary voltage, the winter demand charge will increase $0.75 per kW, or 6.7%, to $11.96.

Q. Please summarize the changes to the Large School Service Experimental TOU rider.

A. The Large School Service Experimental TOU rider was developed in conjunction with the standard Large School Service rate. As a result, the monthly service availability charge was increased by the same amount, $2.80, as the standard Large School Service rate. The base energy charges for primary and secondary voltages, which is applicable to energy usage in all hours, and the on-peak energy adder were adjusted by approximately the same percentages and the respective energy charges under the standard rates. The on-peak energy adders by voltage level were increased by the same percentage as the summer demand charges by voltage level under the standard rate. The demand charges by voltage level were increased by approximately the average increase to the summer and winter demand charges under the standard rate by voltage level. This approach was utilized in order to maintain a consistent

relationship between the TOU rate and the standard Large School Service rate and a consistent relative difference between the base energy charge and the on-peak energy adder within the TOU rate.

G. Guard and Flood Lighting and Municipal and State Street Lighting

Q. Please summarize the changes to Guard and Flood Lighting.

A. The basic rate structure of Guard and Flood Lighting will not change, in that the applicable charge is a set monthly charge that varies according to light type and installation. This approach is consistent with the rate design used in SPS's last base rate case, Docket No. 45524, and approved by the Commission in SPS's last fully litigated base rate case, Docket No. 43695.

Overall, base rate revenue from Guard and Flood Lighting will increase approximately $503,000, or 12.2%. SPS proposes that monthly rates be increased 12.2% to recover costs allocated to Guard and Flood Lighting.

Q. Please summarize the changes to Municipal and State Street Lighting.

A. The basic rate structure of Municipal and State Street Lighting will not change, in that applicable charges include a set monthly charge that varies according to light type and installation. This approach is consistent with the rate design used in SPS's last base rate case, Docket No. 45524, and approved by the Commission in SPS's last fully litigated base rate case, Docket No. 43695.

Overall, base rate revenue from Municipal and State Street Lighting will increase by approximately $781,000, or 20.0%. SPS proposes that monthly rates be increased 20.0% to recover costs allocated to Municipal and State Street Lighting.

VIII. LIGHT-EMITTING DIODE STUDY

Q. In the Docket No. 45524 stipulation, SPS agreed to conduct a study regarding the cost of installing Light-Emitting Diode ("LED") lighting. Has SPS performed that study?

A. Yes. SPS agreed to conduct a study of cost savings associated with the installation of LED lighting by municipalities and to present the results of that study in its next base-rate case.[9]

Q. Please describe the LED study that SPS conducted.

A. Attachment EDE-RD-9 identifies the cost savings to customers of LED lighting installations to High Pressure Sodium ("HPS") lighting of comparable lumens. This identifies the total bill differential per light for the LED and HPS options. This comparison is for new installations.

Attachment EDE-RD-9 also provides a calculation of the payback period for installations for which a municipality requests replacing an existing, functioning HPS street light with an LED street light.

[9] Docket No. 45524, Final Order at Finding of Fact No. 43.

IX. TARIFFS

Q. What topic do you address in this portion of your testimony?

A. I address the proposed changes to SPS's rate tariffs. SPS's proposed rule and rate tariffs are contained in the RFP at Schedule Q-8.8.

A. Rule Tariffs

Q. What are rule tariffs?

A. The Rules, Regulations and Conditions of Service are commonly referred to as rule tariffs. Rule tariffs contain SPS's policies on services such as application for service, customer installation, customer deposits, service disconnection, billing adjustments, metering, and extension of service.

Q. Is SPS proposing any changes or additions to its rule tariffs?

A. Yes. SPS is proposing to amend Tariff No. V-17, Extension to Customers, to propose that SPS perform any required ditching and backfilling to complete the extension with an option given to the customer requesting the extension.

Q. What change does SPS propose to Tariff No. V-17?

A. With respect to underground extensions of service, SPS proposes to reserve the right, or have the first option, to perform any required ditching and backfilling to complete the extension at the customer's expense. If SPS is unable or unwilling to, the Customer shall do it at its own expense in accordance with SPS's specifications.

Q. How is SPS performing any required ditching and backfilling differently than what is authorized currently under Tariff No. V-17?

A. Currently, customers have the option of performing the ditching and backfilling in accordance with SPS's specifications.

Q. Has SPS experienced difficulties with customers performing the ditching and backfilling for underground extensions of service?

A. Yes. Often the ditching and backfilling is not performed to SPS's specifications, which require either SPS or the customer to undertake additional work. The additional work, in turn, leads to delays in completing the extensions. The proposed tariff revision will remove this potential cause for delay and allow extensions to be completed on a timely basis.

SPS witness Brad Baldridge provides further support for this tariff change in his direct testimony in the revenue requirements phase.

B. Rate Tariffs

Q. What are rate tariffs?

A. Rate tariffs specify the terms and conditions under which SPS will provide service, including the rates at which it will provide service.

Q. Does SPS propose changes to its rate tariffs in this proceeding?

A. Yes. As described above, SPS is proposing: (1) changes to its rate tariffs to reflect changes in rates as a result of increased costs and changes in customer class cost allocations; (2) Optional Unmetered Service Riders to its Small General Service and Small Municipal and School Service rates; (3) to eliminate the cap on the number of RSH customers that may participate in the TOU rate plans; and (4) to double the cap on the number of customers that can participate in all of the TOU rate offerings.

In addition, SPS proposes to eliminate the Transmission Qualifying Facility ("QF") Non-Firm Standby Service tariff and to modify the Experimental TOU rider for Large Municipal Service (Electric Tariff Sheet No. IV-175) and Large School

Service (Electric Tariff Sheet No. IV-182) to exclude the "Rule of 80". Finally, SPS proposes changes to the following rate tariffs:

- Electric Tariff Sheet No. IV-86 – Energy Purchase from a QF of Aggregate Generating Capacity of 100 kW or Less;
- Electric Tariff Sheet No. IV-98 – Miscellaneous Service Charge; and
- Electric Tariff Sheet No. IV-193 – Peak Day Partner.

Q. Please explain why SPS is proposing to exclude the Rule of 80 for the Experimental TOU riders for Large Municipal Service (Electric Tariff Sheet No. IV-175) and Large School Service (Electric Tariff Sheet No. IV-182).

A. This modification of these tariffs is to clarify that the "Rule of 80" provision of the definition of billing demand does not apply to the Alternative Experimental Time of Use Riders to the Large Municipal Service or the Large School Service rates. It was not SPS's intent for the "Rule of 80" to apply to the Time of Use options when it was developed and proposed in Docket No. 43695. The Time of Use options for each of these rates contain a demand charge that is lower than the seasonal demand charges under the standard rate by 17% to 33% for Large Municipal Service and by 14% to 37% for Large School Service. In addition, the Time of Use option was designed with an economic incentive to encourage customers to reduce their demand and consumption during on-peak periods.

Q. Please explain why SPS is proposing to eliminate Electric Tariff Sheet No. IV-183 – Transmission QF Non-Firm Standby Service?

A. This tariff is unnecessary. The tariff was developed in a rate case settlement several years ago and no customer has ever taken service or requested service under it.

Q. What change is SPS proposing to Electric Tariff Sheet No. IV-86?

A. Electric Tariff Sheet No. IV-86 applies to customers taking service under SPS's Electric Service to a QF of Aggregate Generating Capacity of 100 kW or less (Sheet IV-77), with installed aggregate generating capacity of 100 kW or less. Currently, this rate schedule provides four metering options. SPS proposes to eliminate Option (4), which provides for net metering in a manner that is not permitted under 16 Tex. Admin. Code § 25.242.

Q. What change is SPS proposing to Electric Tariff Sheet No. IV-98 – Miscellaneous Service Charge?

A. SPS is proposing a 25% increase in the Reconnection Fee provided for under Electric Tariff Sheet No. IV-98 – Miscellaneous Service Charge. The Reconnection Fee provided for under Electric Tariff Sheet No. IV-98 – Miscellaneous Service Charge was last adjusted 10 years ago in Docket No. 32766. Over the past decade, the cost of sending qualified personnel to reconnect disconnected delinquent accounts has increased. Accordingly, increasing the Reconnection Fee is appropriate because it allocates the costs to those who cause the costs to be incurred.

During the Updated Test Year, SPS incurred expenses of $1,742,276 to service 10,575 reconnections for an average cost of $164.75 per reconnection. That average cost is 52.5% more than the highest Reconnect Charge, which is $108.00 for a reconnection during non-business hours and outside city limits. The actual cost incurred per reconnection is significantly greater than the calculated charge. However, SPS is limiting the proposed increase in these charges due to the significant increase and to reflect the fact that SPS expects to gain efficiencies

through resource optimization, fleet optimization, and the Work and Asset Management system ("WAM") and Scheduling system software deployment. WAM applies standardized business processes and new technology to help manage the Company's generation, T&D assets, streamline maintenance, maximize supply chain performance, enhance safety, and improve regulatory compliance.

Q. What change is SPS proposing to Electric Tariff Sheet No. IV-193 – Peak Day Partner?

A. SPS is proposing to eliminate Electric Tariff Sheet No. IV-193 – Peak Day Partner.

Q. Why SPS is proposing to eliminate Electric Tariff Sheet No. IV-193 – Peak Day Partner.

A. This program has not had strong participation since its inception; no customers are served under this tariff, and no customers have taken service under this tariff recently. Furthermore, it would not be cost-effective to maintain this program and the associated information systems for a single or very few participants.

Q. Does this conclude your pre-filed direct testimony?

A. Yes.

AFFIDAVIT

STATE OF TEXAS)
)
COUNTY OF POTTER)

EVAN D. EVANS, first being sworn on his oath, states:

I am the witness identified in the preceding testimony. I have read the testimony and the accompanying attachment(s) and am familiar with the contents. Based upon my personal knowledge, the facts stated in the testimony are true. In addition, in my judgment and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.

DONNA M. ANDERSON
Notary Public, State of Texas
Notary ID #853163-5
My Commission Expires 06-17-2020

EVAN D. EVANS

Subscribed and sworn to before me this 9 day of August, 2017 by EVAN D. EVANS

Donna M. Anderson
Notary Public, State of Texas

My Commission Expires: 6/17/2020

Southwestern Public Service Company

Class Revenue Distribution

Line No.	Customer Class	Base Revenue at Present Rates	ROR at Present Rates	Base Rate Cost of Service at Proposed ROR	ROR at Proposed Rates	Base Rate Revenue Deficiency At Proposed ROR	% Base Rate Revenue Increase	% Base Rate Increase Relative to Average
1	Residential Service	$ 146,273,439	3.91%	$ 180,720,238	7.91%	$ 34,446,799	23.55%	1.56
2	Residential with Space Heat	38,957,608	4.27%	47,195,025	7.91%	8,237,417	21.14%	1.40
3	**Total Residential**	**$ 185,231,047**	**3.98%**	**$ 227,915,263**	**7.91%**	**$ 42,684,216**	**23.04%**	**1.53**
4	Small General Service	$ 20,887,091	5.50%	$ 23,521,043	7.91%	$ 2,633,952	12.61%	0.84
5	Secondary General Service	111,530,214	6.75%	118,476,713	7.91%	6,946,499	6.23%	0.41
6	Primary General Service	66,802,362	6.81%	70,678,833	7.91%	3,876,471	5.80%	0.39
7	Large General Service Trans - 69 kV	23,250,376	4.90%	26,914,886	7.91%	3,664,510	15.76%	1.05
8	Large General Service Trans - 115+ kV	102,279,015	4.60%	119,991,717	7.91%	17,712,702	17.32%	1.15
9	**Total Large General Service Trans**	**$ 125,529,391**	**4.65%**	**$ 146,906,603**	**7.91%**	**$ 21,377,212**	**17.03%**	**1.13**
10	Small Municipal and School Service	$ 1,235,442	7.27%	$ 1,268,297	7.91%	$ 32,855	2.66%	0.18
11	Total Large Municipal Service	$ 7,346,933	4.64%	$ 8,773,109	7.91%	$ 1,426,176	19.41%	1.29
12	Total Large School Service	$ 10,463,735	6.87%	$ 11,040,320	7.91%	$ 576,585	5.51%	0.37
13	Guard & Flood Lighting Service	$ 4,128,450	4.22%	$ 4,631,176	7.91%	$ 502,726	12.18%	0.81
14	Street Lighting Service	3,909,152	3.73%	4,689,735	7.91%	780,583	19.97%	1.33
15	**Total Texas Retail**	**$ 537,063,817**	**5.15%**	**$ 617,901,092**	**7.91%**	**$ 80,837,275**	**15.05%**	**1.00**

Southwestern Public Service Company

Class Revenue Distribution

Line No.	Customer Class	Fuel Factor Revenue	EECRF Revenue	TCRF Revenue	Total Revenue at Present Rates	Total Revenue at Proposed Rates	% Total Revenue Increase	% Total Rate Increase Relative to Average
1	Residential Service	$ 47,653,572	$ 1,673,762	$ 3,262,535	$ 198,863,308	$ 230,047,572	15 68%	2.19
2	Residential with Space Heat	16,193,794	569,306	1,109,675	56,830,383	63,958,125	12 54%	1 75
3	**Total Residential**	**$ 63,847,366**	**$ 2,243,068**	**$ 4,372,210**	**$ 255,693,691**	**$ 294,005,697**	**14.98%**	**2.09**
4	Small General Service	$ 7,871,414	$ 53,924	$ 441,431	$ 29,253,860	$ 31,446,381	7.49%	1 05
5	Secondary General Service	59,780,851	1,126,672	3,069,033	175,506,770	179,384,236	2 21%	0 31
6	Primary General Service	60,034,939	1,015,253	1,858,536	129,711,090	131,729,024	1.56%	0.22
7	Large General Service Trans - 69 kV	$ 29,401,593	$ -	$ 793,577	53,445,546	56,316,479	5.37%	0 75
8	Large General Service Trans - 115+ kV	135,264,421	-	3,404,273	240,947,709	255,256,138	5.94%	0.83
9	**Total Large General Service Trans**	**$ 164,666,014**	**$ -**	**$ 4,197,850**	**$ 294,393,255**	**$ 311,572,617**	**5.84%**	**0.81**
10	Small Municipal and School Service	$ 525,583	$ 5,503	$ 176,205	$ 1,942,733	$ 1,799,383	-7 38%	(1.03)
11	Total Large Municipal Service	$ 4,942,938	$ 19,879	$ 183,134	$ 12,492,884	$ 13,735,926	9 95%	1 39
12	Total Large School Service	$ 4,561,879	$ 206,474	$ 231,165	$ 15,463,253	$ 15,808,673	2.23%	0.31
13	Guard & Flood Lighting Service	$ 671,631	$ -	$ 18,862	$ 4,818,943	$ 5,302,806	10.04%	1.40
14	Street Lighting Service	929,376	-	24,067	4,862,595	5,619,111	15 56%	2 17
15	**Total Texas Retail**	**$ 367,831,990**	**$ 4,670,774**	**$ 14,572,493**	**$ 924,139,073**	**$ 990,403,855**	**7.17%**	**1.00**

Southwestern Public Service Company

Development of
Alternate Target Proposed Revenue Increases by Class

Customer Class	Present Base Rate Revenues	Rate Base	Present FIT, DFIT & ITC	Present Return	Present ROR	Present Relative ROR
Residential Service	185,231,047	699,384,862	5,872,401	27,908,975	3.991%	0.77
Small General Service	20,887,091	70,318,916	1,190,672	3,875,374	5.511%	1.07
Secondary General Service	111,530,214	380,786,765	8,976,521	25,718,263	6.754%	1.31
Small Municipal and School Service	1,235,442	3,354,421	90,727	244,806	7 298%	1.42
Large Municipal Service	7,346,933	27,971,012	334,411	1,299,982	4.648%	0.90
Large School Service	10,463,735	35,688,418	868,710	2,457,097	6.885%	1.34
Primary General Service	66,802,362	221,123,482	5,280,118	15,061,458	6.811%	1.32
Large General Service - Transmission	125,529,391	427,852,214	5,043,958	19,837,598	4 637%	0 90
Street Lighting Service	3,909,152	12,146,121	96,613	459,173	3.780%	0 73
Guard and Flood Lighting Service	4,128,450	8,887 794	110,755	380,072	4.276%	0.83
Total Texas Retail	537,063,817	1,887,514,003	27,864,887	97,242,797	5.152%	1.00

Southwestern Public Service Company

Development of
Alternate Target Proposed Revenue Increases by Class

Customer Class	Base Rate Increase @ Equalized	FIT, DFIT & ITC at Equalized	Return at Equalized	Equalized ROR	Proposed Return	Proposed Base Rate Increase
Residential Service	42,619,987	21,024,859	55,321,343	7.910%	51,388,410	38,631,893
Small General Service	2,630,663	2,123,160	5,562,226	7.910%	5,895,960	2,953,074
Secondary General Service	6,844,420	11,408,715	30,120,233	7.910%	33,132,256	9,846,188
Small Municipal and School Service	33,070	102,106	265,335	7.910%	291,868	58,441
Large Municipal Service	1,419,507	838,772	2,212,507	7.910%	2,129,516	1,333,895
Large School Service	573,438	1,070,825	2,822,954	7.910%	3,105,249	850,266
Primary General Service	3,790,071	6,622,972	17,490,867	7.910%	19,239,954	5,521,350
Large General Service - Transmission	21,628,541	12,787,751	33,843,110	7.910%	32,573,655	20,479,850
Street Lighting Service	788,080	373,928	960,758	7.910%	892,455	710,597
Guard and Flood Lighting Service	509,511	289,513	703,025	7.910%	653,045	451,731
Total Texas Retail	80,837,286	56,642,601	149,302,358	7.910%	149,302,369	80,837,286

Southwestern Public Service Company

Development of
Alternate Target Proposed Revenue Increases by Class

Customer Class	Proposed Target Relative ROR	Target Relative ROR	% Movement toward Equalized	% Base Rate Increase	Relative % Base Rate Increase
Residential Service	0.93	7 35%	68%	20 86%	1 39
Small General Service	1.06	8.38%	14%	14.14%	0.94
Secondary General Service	1.10	8 70%	68%	8.83%	0 59
Small Municipal and School Service	1.10	8 70%	76%	4.73%	0 31
Large Municipal Service	0.96	7 61%	62%	18.16%	1.21
Large School Service	1.10	8 70%	70%	8.13%	0.54
Primary General Service	1 10	8 70%	69%	8.27%	0.55
Large General Service - Transmission	0.96	7.61%	63%	16 31%	1 08
Street Lighting Service	0.93	7.35%	73%	18.18%	1.21
Guard and Flood Lighting Service	0.93	7 35%	58%	10.94%	0 73
Total Texas Retail	1.00	7 91%		15 05%	1 00

Southwestern Public Service Company

Comparison of Percent Increases
Required to Move Classes to System Average

Class	Docket No 43695 Final Order	Docket No. 45524 Filed Update Class Cost of Service	% Difference from Docket No. 43695	Current Filed Class Cost of Service	% Difference from Docket No. 45524
Residential Service	1 76%	11 90%	10 14%	23.55%	11.65%
Residential Space Heating	-8 52%	6 35%	14 88%	21.14%	14 79%
Total Residential Service	-1 15%	10 46%	11 61%	23.04%	12 59%
Small General Service	-7 34%	20 13%	27 48%	12.61%	-7 52%
Secondary General	-8.04%	22 89%	30 93%	6.23%	-16 66%
Primary General	-5.69%	19.65%	25.34%	5.80%	-13.85%
Large General Service - Trans 69 kV	13.83%	6.74%	-7 09%	15.76%	9 02%
Large General Service - Trans 115+ kV	8 59%	9.42%	0.83%	17.32%	7 90%
Total Large General Service - Trans	9.49%	8 92%	-0.57%	17.03%	8.11%
Small Municipal and School Service	2.28%	-0.47%	-2.75%	2.66%	3 13%
Large Municipal Service	3 43%	7.79%	4.36%	19.41%	11.62%
Large School Service	-1 02%	22 10%	23.12%	5.51%	-16 59%
Street Lighting Service	24 28%	-3 31%	-27 59%	19 97%	23.28%
Guard and Flood Lighting Service	8.28%	-11 69%	-19.97%	12 18%	23.87%
Total Texas Retail	**-0.79%**	**13.72%**	**14.51%**	**15.05%**	**1.33%**

Southwestern Public Service Company

Date and Time of Historical
Summer Monthly Peaks

Year	Month	Day	Weekday	Hour Ending (CDT)
2005	JUNE	30	THU	17:00
2005	JULY	25	MON	17:00
2005	AUGUST	3	WED	17:00
2005	SEPTEMBER	20	TUE	17:00
2006	JUNE	20	TUE	17:00
2006	JULY	20	THU	18:00
2006	AUGUST	10	THU	16:00
2006	SEPTEMBER	1	FRI	17:00
2007	JUNE	19	TUE	17:00
2007	JULY	27	FRI	17:00
2007	AUGUST	20	MON	17:00
2007	SEPTEMBER	6	THU	17:00
2008	JUNE	16	MON	17:00
2008	JULY	31	THU	18:00
2008	AUGUST	5	TUE	17:00
2008	SEPTEMBER	5	FRI	17:00
2009	JUNE	25	THU	17:00
2009	JULY	14	TUE	17:00
2009	AUGUST	5	WED	17:00
2009	SEPTEMBER	2	WED	18:00
2010	JUNE	22	TUE	17:00
2010	JULY	30	FRI	17:00
2010	AUGUST	4	WED	17:00
2010	SEPTEMBER	1	WED	17:00
2011	JUNE	24	FRI	17:00
2011	JULY	27	WED	17:00
2011	AUGUST	2	TUE	17:00
2011	SEPTEMBER	2	FRI	17:00
2012	JUNE	28	THU	17:00
2012	JULY	31	TUE	17:00
2012	AUGUST	2	THU	17:00
2012	SEPTEMBER	4	TUE	17:00

Southwestern Public Service Company

Date and Time of Historical
Summer Monthly Peaks

Year	Month	Day	Weekday	Hour Ending (CDT)
2013	JUNE	27	THU	17:00
2013	JULY	10	WED	17:00
2013	AUGUST	6	TUE	17:00
2013	SEPTEMBER	4	WED	17:00
2014	JUNE	4	WED	17:00
2014	JULY	25	FRI	17:00
2014	AUGUST	7	THU	16:00
2014	SEPTEMBER	2	TUE	17:00
2015	JUNE	11	THU	17:00
2015	JULY	28	TUE	17:00
2015	AUGUST	6	THU	17:00
2015	SEPTEMBER	3	THU	17:00
2016	JUNE	22	WED	18:00
2016	JULY	13	WED	17:00
2016	AUGUST	2	TUE	17:00
2016	SEPTEMBER	9	FRI	17:00
2017	JUNE	17	SAT	18:00

Southwestern Public Service Company

Service Availability Charge Determination
12 Months Ending December 31, 2015

Line No.	Class / Rate	Annual Bills	Total Customer Rev Req.	Total $/Month	Service Availability Charge $/Month	Customer Costs Recovered through Monthly Service Availability Charge	Customer Costs to be Recovered through Other Charges
	Residential						
1	R	2,430,024	$ 29,907,546	$ 12.31	$ 10.00	$ 24,300,240	$ 5,607,306
	Small General Service						
2	SGS	390,480	$ 5,053,415	$ 12.94	$ 12.90	$ 5,037,192	$ 16,223
3	SGS- Unmetered	390,480	$ 2,830,173	$ 7.25	$ 7.25	$ 2,830,173	$ 0
	Secondary General						
4	SG	142,992	$ 4,011,719	$ 28.06	$ 28.10	$ 4,018,075	$ (6,356)
	Primary General (less SAS recovery)						
5	PG, PQF	45,888	$ 1,816,395	$ 39.58	$ 39.60	$ 1,817,165	$ (770)
	SAS-4 and -8		$ 99,364				
	Large General Transmission						
6	LGS-T, TQF	735	$ 1,722,739	$ 2,343.86	$ 2,344.00	$ 1,722,840	$ (101)
	Small Municipal & School						
7	SMS	34,248	$ 460,201	$ 13.44	$ 13.40	$ 458,923	$ 1,278
8	SMS Unmetered	34,248	$ 261,066	$ 7.62	$ 7.60	$ 260,285	$ 781
	Large Municipal						
9	LMS	11,112	$ 282,565	$ 25.43	$ 25.40	$ 282,245	$ 320
	Large Schools						
10	LSS	8,664	$ 295,241	$ 34.08	$ 34.10	$ 295,442	$ (201)
11	Street Lighting	360,504	$ 3,123,950	$ 8.67	(1)		
12	Guard and Flood Lighting	266,261	$ 3,500,183	$ 13.15	(1)		

(1) Street and Area Lighting customer costs are included with other costs in monthly charge

SOUTHWESTERN PUBLIC SERVICE COMPANY
Proposed Communication Plan for
Elimination of Residential Space Heating Rider and Promotion of Residential TOU Option

Background

In Southwestern Public Service Company's (SPS) last rate case, Docket No. 45524, SPS, the Office of Public Utility Counsel ("OPUC) and the Staff of the Public Utility Commission of Texas ("Staff") agreed to "work cooperatively before SPS files its next base-rate case to: (i) develop a plan to inform RSH customers that the RSH option is ending and to communicate to RSH customers the value of the residential time of use rider; and (ii) develop a plan to market the residential time of use rider in general. SPS agreed to implement the plans prior to the conclusion of its next base-rate case."

Below is a discussion of SPS's proposed response to both of these requirements.

Plan to Inform RSH Customers

SPS is proposing a multi-faceted approach to inform Residential Service customers taking service under Electric Space Heating Rider ("RSH") that rate option is ending and to communicate to RSH customers the potential benefits of the Residential TOU rider option. Below is a discussion of SPS's proposed communications efforts:

- As soon as practical after the new rates from the upcoming rate case are approved, SPS will send a direct mail letter notice to every current RSH to inform them that the RSH rider is being terminated and to make them aware of the availability of the Residential TOU option,
- At the same time, SPS will also use social media outlets to inform customers the RSH rate option is being terminated and to educate them on the Residential TOU option; and
- SPS will have informational notices (onserts) on all Residential Service customer bills in August, prior to the end of the on-peak season, which will highlight the attributes of the Residential TOU option.

It is expected that the only incremental cost for these communications will be the cost of the direct mailing and the set-up for the bill onserts. The estimated total cost for the direct mailing and bill onserts will be $20,270.

These additional efforts are in addition to the fact that SPS has educated its Customer Contact Associates about the attributes of the Residential TOU option and to inform customers of that service option when customers call to initiate service.

SOUTHWESTERN PUBLIC SERVICE COMPANY

Residential Rate Design

	Present Rates				Proposed Rates			
Description	Rate	Billing Units	Unit Definition	Component Revenue	Adjustment %	Rate	Billing Units	Component Revenue
Residential Service								
Service Availability Charge	$ 10 00	2,011,440	Bill	$20,114,400	0 0000%	$ 10 00	2,011,440	$20,114 400
Summer Energy Charge	$ 0 078572	731 296 270	kWh	$57,459,411	28 2770%	$ 0 100790	731,296,270	$73 707 351
Winter Energy Charge Block 1	$ 0 068353	744,901 485	kWh < 900	$50,916,251	25 3639%	$ 0 085690	744,901,485	$63,830 608
Winter Energy Charge Block 2	$ 0 068353	259,550,356	kWh > 900	$17,741,045	-8 2410%	$ 0 062720	259,550,356	$16,278,998
Total Base Revenue				$146 231 107				$173,931 358
Residential Service with Electric Space Heating								
Service Availability Charge	$ 10 00	418,080	Bill	$4,180,800	0 0000%	$ 10 00	418,080	$4,180,800
Summer Energy Charge	$ 0 078572	202,930,972	kWh	$15,944,692	28 2770%	$ 0 100790	202,930 972	$20,453,413
Winter Energy Charge Block 1	$ 0 048582	216 959 679	kWh < 900	$10 540 335	76 3822%	$ 0 085690	216,959,679	$18 591,275
Winter Energy Charge Block 2	$ 0 048582	170 675,981	kWh ≥ 900	$8,291,781	29 1013%	$ 0 062720	170,675,981	$10 704 798
Total Base Revenue				$38 957 608				$53,930,285
Residential Service Time of Use								
Service Availability Charge	$ 10 50	504	Bill	$5 292	0 0000%	$ 10 50	504	$5,292
Off-Peak Energy Charge	$ 0 058183	520,122	kWh	$30,262	26 5225%	$ 0 073615	520,122	$38,289
On-Peak Energy Adder	$ 0 124929	54,250	On-Peak kWh	$6,777	26 5225%	$ 0 158063	54,250	$8,575
Total Base Revenue				$42,332				$52,156
Total Residential Service				$185,231,047				$227,913,798
$ Increase								$42,682,752
Target $ Increase								$42,684,216
Difference from Target								-$1,464

Price Differentials	Current	Proposed	Change
Summer - Winter Energy Block 1	$0 010219	$0 015100	$0 004881
Winter Energy Block 1 to Block 2	$0 000000	$0 022970	$0 022970

Description	Average kWh	Impact at 25% of Average	Impact at 50% of Average	Impact at 75% of Average	Impact at 100% of Average	Impact at 150% of Average	Impact at 200% of Average	Impact at 300% of Average
Base Rate Impacts by Usage Level								
Residential Service - Summer	1120	19 44%	23 04%	24 56%	25 39%	26 29%	26 76%	27 25%
Residential Service - Winter	761	14 34%	18 32%	20 19%	21 27%	16 18%	10 61%	4 71%
Residential Space Heating - Summe	1459	20 96%	24 08%	25 33%	26 01%	26 72%	27 10%	27 48%
Residential Space Heating - Winter	1303	46 81%	58 04%	60 01%	53 33%	46 03%	42 10%	37 99%
Total Bill Impacts by Usage Level								
Residential Service - Summer	1120	14 05%	16 03%	16 82%	17 24%	17 69%	17 92%	18 16%
Residential Service - Winter	761	10 23%	12 39%	13 32%	13 84%	9 88%	5 78%	1 50%
Residential Space Heating - Summe	1459	14 91%	16 57%	17 21%	17 55%	17 90%	18 09%	18 27%
Residential Space Heating - Winter	1303	32 19%	37 44%	37 55%	32 55%	27 23%	24 45%	21 58%

SOUTHWESTERN PUBLIC SERVICE COMPANY

Alternative Residential Rate Design

	Present Rates				Proposed Rates			
Description	Rate	Billing Units	Unit Definition	Component Revenue	Adjustment %	Rate	Billing Units	Component Revenue
Residential Service								
Service Availability Charge	$ 10 00	2,011,440	Bill	$20,114,400	20 0000%	$ 12 00	2,011,440	$24,137,280
Summer Energy Charge	$ 0 078572	731,296,270	kWh	$57,459,411	21 2980%	$ 0 095306	731,296,270	$69,696,922
Winter Energy Charge	$ 0 068353	1 004,451,841	kWh < 900	$68,657,297	21 2983%	$ 0 082911	1,004,451,841	$83,280,107
Total Base Revenue				$146,231,107				$177,114,309
Residential Service with Electric Space Heating								
Service Availability Charge	$ 10 00	418,080	Bill	$4,180,800	20 0000%	$ 12 00	418,080	$5,016,960
Summer Energy Charge	$ 0 078572	202,930,972	kWh	$15,944,692	21 2980%	$ 0 095306	202,930,972	$19,340,539
Winter Energy Charge	$ 0 048582	387,635,660	kWh < 900	$18,832,116	70 6620%	$ 0 082911	387,635,660	$32,139,260
Winter Energy Credit	$ -	387,635,660	kWh ≥ 900	$0		$ (0 014828)	387,635,660	-$5,747,958
Total Base Revenue				$38,957,608				$50,748,801
Residential Service Time of Use								
Service Availability Charge	$ 10 50	504	Bill	$5,292	20 0000%	$ 12 60	504	$6,350
Off-Peak Energy Charge	$ 0 058183	520,122	kWh	$30,262	23 5033%	$ 0 071858	520,122	$37,375
On-Peak Energy Adder	$ 0 124929	54,250	On-Peak kWh	$6,777	23 5033%	$ 0 154292	54,250	$8,370
Total Base Revenue				$42,332				$52,096
Total Residential Service				$185,231,047				$227,915,205
$ Increase								$42,684,159
Target $ Increase								$42,684,216
Difference from Target								-$57

Price Differentials	Current	Proposed	Change
Summer - Winter Energy Charge	$0 010219	$0 012395	$0 002176
RS to RSH Price Differential/Credit	-$0 019771	-$0 014828	$0 004943

Description	Average kWh	Impact at 25% of Average	Impact at 50% of Average	Impact at 75% of Average	Impact at 100% of Average	Impact at 150% of Average	Impact at 200% of Average	Impact at 300% of Average
Base Rate Impacts by Usage Level								
Residential Service - Summer	1120	20 89%	21 06%	21 13%	21 17%	21 21%	21 23%	21 25%
Residential Service - Winter	761	20 73%	20 94%	21 03%	21 09%	21 15%	21 18%	21 22%
Residential Space Heating - Summe	1459	20 96%	21 10%	21 16%	21 19%	21 23%	21 24%	21 26%
Residential Space Heating - Winter	1303	32 34%	35 30%	36 64%	37 39%	38 22%	38 67%	39 13%
Total Bill Impacts by Usage Level								
Residential Service - Summer	1120	15 20%	14 52%	14 25%	14 11%	13 95%	13 87%	13 79%
Residential Service - Winter	761	15 73%	14 90%	14 54%	14 35%	14 13%	14 02%	13 91%
Residential Space Heating - Summe	1459	14 91%	14 34%	14 12%	14 00%	13 88%	13 82%	13 76%
Residential Space Heating - Winter	1303	21 71%	21 99%	22 11%	22 17%	22 23%	22 27%	22 30%

Southwestern Public Service Company

Calculation of LED Payback Compared to Previous Light Types - Texas Retail
For the Test Year Ended June 30, 2017

7,000 lumen MV Replaced by 4,000 lumen LED

Proposed 7,000 lumen MV rate	$ 7 97
+ Fuel Charge	$ 1 86
Total Bill	$ 9 83
Proposed 4,000 lumen LED rate	$ 7 45
+ Fuel Charge	$ 0 36
Total Bill	$ 7 81
Savings per Month	**$ 2.02**
Retirement of Existing Fixture	$ 179 40
÷ Savings per Month	$ 2 02
Months to Payback	**89**

20,000 lumen MV Replaced by 6,000 lumen LED

Proposed 20,000 lumen MV rate	$ 13 35
+ Fuel Charge	$ 4 14
Total Bill	$ 17 49
Proposed 6,000 lumen LED rate	$ 11 37
+ Fuel Charge	$ 0 58
Total Bill	$ 11 95
Savings per Month	**$ 5.54**
Retirement of Existing Fixture	$ 179 40
÷ Savings per Month	$ 5 54
Months to Payback	**33**

35,000 lumen MV Replaced by 14,000 lumen LED

Proposed 35,000 lumen MV rate	$ 18 55
+ Fuel Charge	$ 7 05
Total Bill	$ 25 60
Proposed 14,000 lumen LED rate	$ 17 38
+ Fuel Charge	$ 1 40
Total Bill	$ 18 78
Savings per Month	**$ 6.82**
Retirement of Existing Fixture	$ 179 40
÷ Savings per Month	$ 6 82
Months to Payback	**27**

50,000 lumen MV Replaced by 25,000 lumen LED

Proposed 50,000 lumen MV rate	$ 22 58
+ Fuel Charge	$ 9 95
Total Bill	$ 32 53
Proposed 25,000 lumen LED rate	$ 24 80
+ Fuel Charge	$ 2 22
Total Bill	$ 27 02
Savings per Month	**$ 5.51**
Retirement of Existing Fixture	$ 179 40
÷ Savings per Month	$ 5 51
Months to Payback	**33**

15,000 lumen HPS Replaced by 6,000 lumen LED

Proposed 15,000 lumen HPS rate	$ 15 15
+ Fuel Charge	$ 1 54
Total Bill	$ 16 69
Proposed 6,000 lumen LED rate	$ 11 37
+ Fuel Charge	$ 0 58
Total Bill	$ 11 95
Savings per Month	**$ 4.74**
Retirement of Existing Fixture	$ 192 09
÷ Savings per Month	$ 4 74
Months to Payback	**41**

25,000 lumen HPS Replaced by 14,000 lumen LED

Proposed 25,000 lumen HPS rate	$ 19 77
+ Fuel Charge	$ 2 66
Total Bill	$ 22 43
Proposed 14,000 lumen LED rate	$ 17 38
+ Fuel Charge	$ 1 40
Total Bill	$ 18 78
Savings per Month	**$ 3.65**
Retirement of Existing Fixture	$ 187 07
÷ Savings per Month	$ 3 65
Months to Payback	**52**

50,000 lumen HPS Replaced by 25,000 lumen LED

Proposed 50,000 lumen HPS rate	$ 32 20
+ Fuel Charge	$ 4 36
Total Bill	$ 36 56
Proposed 25,000 lumen LED rate	$ 24 80
+ Fuel Charge	$ 2 22
Total Bill	$ 27 02
Savings per Month	**$ 9.54**
Retirement of Existing Fixture	$ 192 09
÷ Savings per Month	$ 9 54
Months to Payback	**21**

MV = Mercury Vapor

HPS = High Pressure Sodium

Southwestern Public Service Company

Workpapers of Evan D. Evans

2017 TX Rate Case

**APPLICATION OF
SOUTHWESTERN PUBLIC SERVICE COMPANY
FOR AUTHORITY TO CHANGE RATES**

EDE-RD-10(CD)